

Barton County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/8/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Barton County economy.¹

These 19 sectors have a total direct output of approximately **\$776.7 million** and support **1,444 jobs** in Barton County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Barton County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	1443.8	7.26%	\$140,872,073	10.51%	\$776,749,806	57.95%
Indirect Effect	1165.9	5.86%	\$77,080,023	5.75%	\$139,345,213	10.40%
Induced Effect	592.9	2.98%	\$37,804,523	2.82%	\$68,378,418	5.10%
Total Effect	3202.6	16.10%	\$255,756,619	19.08%	\$984,473,437	73.45%

As shown in the above table, agriculture, food, and food processing sectors support **3,203 jobs**, or **16.10%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$984.5 million**, roughly **73.45%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately **\$255.8 million**, or **19.08% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **19.08% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **614 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Barton County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	614.0	\$163,885,048
Support activities for agriculture and forestry	421.5	\$15,231,938
Dog and cat food manufacturing	277.7	\$388,968,084
Wholesale trade	155.0	\$35,413,794
Truck transportation	127.7	\$21,926,478
Animal, except poultry, slaughtering	126.6	\$86,659,120
Landscape and horticultural services	117.9	\$5,443,629
Real estate	84.3	\$12,948,416
Grain farming	79.3	\$62,328,340
Animal production, except cattle and poultry and eggs	74.7	\$17,581,881

The dog and cat food manufacturing sector directly contributes approximately **\$389.0 million** to the Barton County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Dog and cat food manufacturing	277.7	\$388,968,084
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	614.0	\$163,885,048
Animal, except poultry, slaughtering	126.6	\$86,659,120
Grain farming	79.3	\$62,328,340
Wholesale trade	155.0	\$35,413,794
Truck transportation	127.7	\$21,926,478
Oilseed farming	8.7	\$18,580,292
Animal production, except cattle and poultry and eggs	74.7	\$17,581,881
Support activities for agriculture and forestry	421.5	\$15,231,938
Other animal food manufacturing	10.6	\$13,616,270

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Barton County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	8.7	\$18,580,292.06
Grain farming	79.3	\$62,328,339.66
Vegetable and melon farming	0.3	\$63,880.24
Fruit farming	0.6	\$64,807.45
Greenhouse, nursery, and floriculture production	2.3	\$354,963.25
All other crop farming	27.4	\$4,348,890.85
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	614.0	\$163,885,047.88
Dairy cattle and milk production	11.2	\$5,521,444.58
Poultry and egg production	0.5	\$489,019.42
Animal production, except cattle and poultry and eggs	74.7	\$17,581,881.38
Commercial logging	2.4	\$105,922.44
Commercial hunting and trapping	5.0	\$100,639.05
Dog and cat food manufacturing	277.7	\$388,968,083.80
Other animal food manufacturing	10.6	\$13,616,270.25
Animal, except poultry, slaughtering	126.6	\$86,659,120.20
Bread and bakery product, except frozen, manufacturing	17.9	\$2,184,105.38
Frozen cakes and other pastries manufacturing	1.1	\$173,225.88
Veterinary services	65.8	\$6,280,243.22
Landscape and horticultural services	117.9	\$5,443,629.42

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Barton County, the retail sector was omitted.